TREE TALK

DIVERSIFY TREE PLANTING IN LEXINGTON THIS AUTUMN

By Karen Longeteig, Lexington Tree Committee member and Landscape Designer

Natty Bumppo's forest 200 years ago was probably a chestnut-oak-maple mix. The chestnuts are truly gone, due to an epidemic, but then the oaks and most of the rest of the trees disappeared as well, under the early settlers' pressing needs for fuel, building material, and open fields in which to grow crops. When farmers later abandoned their pastures to work in the mills, our forest reverted to an oak/hickory/white pine mix. (Where we were lucky, that is. Other abandoned land succumbed to Norway Maple, Tree of Heaven, and Buckthorn, all extremely thrifty invasive competitors, which have one thing in common: they all stink. Really! Crush a leaf of any of them and smell the rank and weedy odors!)

Deliberate street tree planting was carried out only from around 1860, and the elm predominated. It was the perfect street tree. But our love and overplanting of the elm became its doom, when the monoculture and the fusion of adjacent elm roots allowed the Dutch Elm Disease to spread so quickly that it wiped most of them out. We should have learned a lesson from that: there is no one perfect street tree, and *diversity of species* is a must to avoid epidemic tree disease.

A case in point is the new tree menace, Winter Moth, which preys especially on Maple and Red Oak. It has been shredding both of them in the past two years. If we had had a greater diversity of tree species, the moth may not have become so abundant.

When people need to choose a tree species, they are sometimes stumped (OK, pun intended). Looking around them, they will think, well, the neighbors have a nice maple, what about that? Folks, there are MANY great native tree species out there, non-Maples, that are underused and would make wonderful diverse additions to Lexington's urban forest, whereas the maple genus is greatly OVERused here. Our street trees are about 35% maple, with many being the exotic invasive Norway Maple or its popular dark-leafed cultivar, the Crimson King. Even the native Sugar Maple may not be entirely recommendable, with its sensitivity to salt and

hot weather. I suggest a moratorium on Maple planting for a few years. It would not be pleasant to have 1/3 of our trees die at once.

Fall is a great time to plant trees. They can go in from September until the ground freezes hard, and in fact, planting them after they have lost their leaves is usually no problem. They will slowly establish their roots in the winter and be really ready to grow in the spring.

In that spirit, I offer you a list of nine under-used native trees from which to choose. Those of you lucky enough to have been at the William Cullina lecture on September 13 will recognize them all.

Why native trees? While there are many desirable exotic trees – not all are invasive – it is the native trees that will contribute the most to our biodiversity of plants, insects, birds, and small mammals. You will NOT notice indigenous bird or mammal species really relishing the seeds of Japanese Maple. Why would they? They haven't co-evolved with it.

Some of these trees are tall shade-giving trees, some are ornamentals. Some like soggy ground; others will withstand drought. All are usually available in nurseries.

A successful tree planting usually has had some consideration beforehand of the site and getting the right tree for right place. First, pick your site. Do you need a tree on the southwest corner of the house? Its shade can help you cut air-conditioning bills dramatically. I know a couple on North Hancock who are able to forego A/C entirely thanks to an enormous European Beech on the southwest corner of their house. Choose a large deciduous tree.

Or, does your house feel too exposed to the street? Three or four street trees can not only help you establish the emotional bounds of your property, without a fence, but will also do a favor to the entire community by cooling not only your front yard but the hot asphalt street. Think BIG here, not ornamental.

Do you need shade on your patio? A medium-size tree that branches lower to the ground will cast the most shade, but choose one that doesn't drop copious seed. Perhaps a Yellowwood?

Do you have a place for only a small tree, but you are a birdwatcher? A small tree that provides berries for the birds, such as a Pagoda Dogwood or a Serviceberry, will give you a lot of free pleasure for years. You will also want to consider the amount of water naturally available, or the amount of watering you are willing to do. The Lexington Tree Management Manual (on line at the Town Website, or $5 hard copy) has more suggestions on pages 8-9 about tree species. Or you can direct your questions to the Lexington Tree Committee's new email address, lexingtontree@yahoo.com .

Tall shade trees:

A Tuliptree (*Liriodendron tulipifera)*, also known as Yellow Poplar, can be seen to the left of the front door of Buckman Tavern – a magnificent example. Tuliptree is our tallest native tree, reaching up to 180 feet in the wild and often 90 feet or more in cultivation. It has dramatically shaped large leaves which are resistant to most insect attack, and large, beautiful blooms. They are suitable for sites with plenty of room. My personal dream is to see them planted in significant numbers around the borders of the Common, the Buckman Tavern, and the Belfry Hill, tying the three historic areas together. Tuliptree grows extremely fast so is one of the trees you can plant smallish and still see a real tree in five years, and it has a good yellow fall color.

The Kentucky Coffeetree (*Gymnocladus dioicus*, 60-70 feet) has amazingly fern-like divided leaves up to 3 feet long and 2 feet wide that are nearly tropical in appearance – it can be a show-stopper. I don't know where any are planted in Lexington, but they can be seen in Mount Auburn cemetery and at the Lyman Estate in Waltham. The Coffeetree is tough and takes a wide variety of sites and water availability, even city conditions, but needs a large space and full sun. There are male and female trees – if you plant a male tree you will not have to cope with large pods and seeds; on the other hand, tree expert Michael Dirr says the seeds from the female tree are great fun to hit with a baseball bat.

The American Elm 'Princeton' (*Ulmus Americana 'Princeton',* 60-80 ft.) is a disease-resistant selection of the *original* American Elm, unlike many new disease-resistant cultivars that have been cross-bred with European and Asian elms. I don't know why that makes a difference to me, but it does. Perhaps because the Princeton retains more of the original elm's graceful vase-like shape, and some of the new varieties are more lumpy. You can see new Princeton Elms both in Depot Square and in the quad at Lexington High

School. While it is probably still unwise to plant a whole row of elms, a single elm here and there in a large site is a symbol of hope.

Sweet Gum (*Liquidambar styraciflua, 60-75 ft*) has some of the prettiest leaves around – nearly identical to a five-pointed star – and wonderful fall color. Its twigs and branches develop a characteristic longitudinal corky "wing" or ridge, and also exude a sweet gummy resin if broken. You can see a Sweet Gum just outside the Visitor's Center. It needs room for root development, so is suitable for the middle of a lawn or park. Plan to let the picturesque but spiny "gumdrop" balls drop onto a lawn, not on your sidewalk or patio.

Medium-sized trees:

Yellowwood (*Cladrastis kentuckea*, 30-50') has a number of virtues. It drips with magnificent, panicled chains of white flowers in June that are even more fragrant in the dark. It has smooth grey bark like a beech, and good yellow fall color. It is a member of the pea family, so it fixes its own nitrogen in the soil. Why doesn't everyone have one? It is fairly slow growing, and doesn't flower heavily every year. It branches low and can be fairly wide (up to 40-50') so leave it plenty of room. There is one on the Buckman Tavern grounds.

Tupelo or Black Gum (*Nyssa sylvatica*, 20-50') is one of the first trees to color in the fall, and the color is spectacular – a brilliant, shiny red. This signals to the birds that its purplish-blue fruits are ripe (on female trees). On the Cape I saw an interior branch of a Tupelo already turning red in the first week of August. They like wet ground, and are thus perfect to plant in a boggy spot or near a swale, but can tolerate drier conditions as well. The deep green leaves are small and attractively shiny, and the blossoms are fragrant and lure bees. Prized tupelo honey is produced in the mid-south.

Smaller or ornamental trees:

Sourwood (*Oxydendron arboreum*, 20-30') is well worth the sometimes slow establishment period that it takes. It stays narrow and only grows tall if it has to climb up amongst competition of trees or houses. Planting 3 or more together in a grove gives a spectacular result. The leaves are a long, tender, translucent green somewhat like peach tree leaves. Sourwood blooms in July and August when nothing much else is going on, with delicate sprays of white flowers. In autumn, the graceful drooping panicles

of yello-green seed capsules contrast strikingly with the leaves color smoky purple, orange, and dark red-pink -- truly a great fall tree. You can see a sourwood planting in a yard on the eastern side of Mass Ave near Muzzey condominiums, and a large single one on Butler Avenue in the middle of the block.

Pagoda Dogwood (*Cornus alternifolia*, 25-30'), less well-known than its Flowering Dogwood cousin, is nevertheless recommended for its rarity, its wildlife value, and for its trouble-free understory preferences. Its whorled and tiered branch arrangement, reminiscent of an Asian pagoda, gives this American native its name, and its architectural value in the garden. Cold winters? No problem, it thrives in Vermont woods. Its flowers are in clusters resembling a Viburnum, and its August fruits are relished by birds. Even though the seeds go fast, it retains colorful red fruit stems on the trees for another couple of weeks. Make sure it gets plenty of water.

Serviceberry, Juneberry, and Shadblow are common names for *Amelanchier canadensis, A. laevis, or A. arborea.* This apple relative is a great four season small tree or large shrub. It has white blossoms like an apple tree in spring, red edible fruits in summer, beautiful orange and red fall color, and smooth grey bark to admire in the winter. It is highly valuable to wildlife, a butterfly host as well as a bird feeder. You can make a pie from the fruits. There are several planted at LHS, two at the end of the math building and three outside the foreign language building. It tends to get a little chewed-up looking by the end of the summer (it is delicious to a lot of things) so don't plant it by the front door, but enjoy it at wood's edge or on the border.

American Hophornbeam (*Ostrya virginiana,* 25 to 40') is completely native to Lexington – you will find them in the woods here. They are slow-growing with a well-ordered narrow crown, and thus very suitable for a small space. The bark curls and peels picturesquely like old paint, lifting the chip from both ends but holding fast in the middle. It has birch-like serrated leaves which stay clean and disease-free. Most importantly, as an understory tree, it can take shade and drought and a variety of soil conditions. The seeds hang down in an interesting cluster like hops.

Give any of these trees a good start by 1" of water per week for the first two or preferably three years, and adding 2 – 3" of mulch but not touching the trunk. Enjoy your fall planting!